

CLAIMS

1. Telecommunication cable comprising an elongated element housing at least one transmitting element, said element comprising a water-soluble polymeric composition which comprises:
- a vinyl alcohol/vinyl acetate copolymer having a saponification degree of from about 60% to about 95%;
 - a plasticizer;
 - a hydrolysis stabilizer compound comprising a chelant group
- comprising two hydrogen atoms bonded to two respective heteroatoms selected from nitrogen, oxygen and sulfur, said two hydrogen atoms having a distance between each other of from 4.2×10^{-10} m to 5.8×10^{-10} m, preferably of from 4.5×10^{-10} m to 5.5×10^{-10} m, said stabilizer compound being present in an amount of at least 0.75 mmoles per 100 g of copolymer.
2. Telecommunication cable according to claim 1 wherein the amount of said chelant group is of at least 0.8 mmoles per 100 g of said copolymer.
3. Telecommunication cable according to claim 1 wherein the amount of said chelant group is of at least 1.0 mmoles per 100 g of said copolymer.
4. Telecommunication cable according to claim 1 wherein the amount of said chelant group is lower than about 3.5 mmoles per 100 g of said copolymer.
5. Telecommunication cable according to claim 1 wherein the amount of said chelant group is lower than about 3.0 mmoles per 100 g of copolymer.
6. Telecommunication cable according to claim 1 wherein said two heteroatoms forming said chelant group are nitrogen atoms.
7. Telecommunication cable according to claim 6 wherein said two nitrogen atoms are included in two respective amide moieties of formula -CO-NH-.

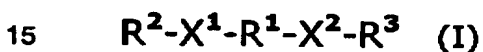
8. Telecommunication cable according to claim 1 wherein the amount of copolymer is from about 50% to about 95% of the total weight of the polymeric composition.

9. Telecommunication cable according to claim 1 wherein the amount of copolymer is from about 60% to 85% of the total weight of the polymeric composition.

10. Telecommunication cable according to claim 1 wherein said plasticizer is present in an amount of from 5 to 30 parts by weight per hundred parts by weight of the copolymer.

11. Telecommunication cable according to claim 1 wherein said plasticizer is present in an amount of from 10 to 25 parts by weight per hundred parts by weight of the copolymer.

12. Telecommunication cable according to claim 1 wherein said stabilizer compound is a compound of formula I:



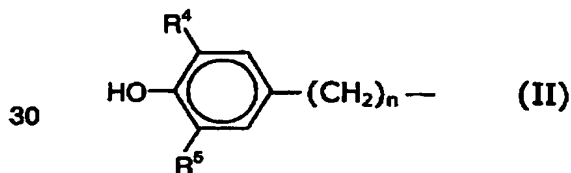
wherein

R^1 represents a linear or branched C_1 - C_{10} alkylene, optionally substituted with one or two groups selected from alkyl substituted or unsubstituted phenyl, benzyl or hydroxyphenyl;

20 X^1 and X^2 each independently represent a moiety comprising a heteroatom-bonded hydrogen selected from $-NH-$, $-CO-NH-$, $-CH(OH)-$ or $-CH(SH)-$;

each of R^2 and R^3 independently represent a linear or branched C_1 - C_{10} alkyl, optionally substituted with a group selected from alkyl substituted or unsubstituted phenyl, benzyl or hydroxyphenyl.

13. Telecommunication cable according to claim 12 wherein R^2 and R^3 each independently represent a moiety of formula (II):



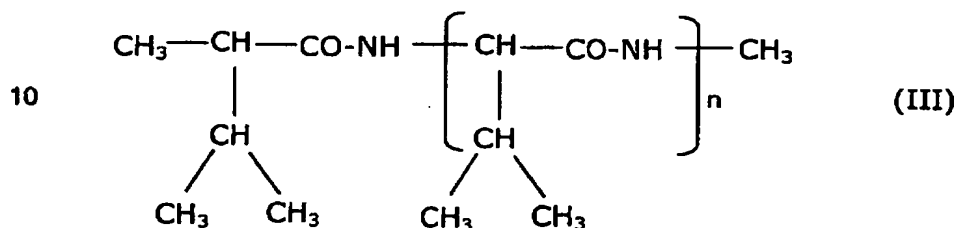
wherein R^4 and R^5 independently represent a C_1 - C_6 linear or branched alkyl moiety, preferably t-butyl, and n is an integer from 0 to 6, preferably 2.

14. Telecommunication cable according to claim 12 wherein said heteroatom moieties X_1 and X_2 are amide groups of formula $-\text{CO}-\text{NH}-$

15. Telecommunication cable according to claim 1 wherein said stabilizer compound is N,N'-esan-1,6-dillobis[3,5-di-ter-butyl-4-

5 hydroxyphenyl)propionamide].

16. Telecommunication cable according to claim 1 wherein said stabilizer compound is a poli L-aminoacid of formula (III):



where n is an integer from 1 to 5.

15 **17.** Telecommunication cable according to claim 1 wherein said copolymer has a hydrolysis degree of from about 70% to about 92%.

18. Telecommunication cable according to claim 1 wherein said elongated element containing the at least one transmitting element is a tubular element comprising at least one sheath made from said water-
20 soluble polymeric composition.

19. Telecommunication cable according to claim 18 wherein said tubular element comprises a double layer sheath in which the inner sheath is made from said water-soluble polymeric composition and the outer sheath is made from a water-insoluble polymer material.

25 **20.** Telecommunication cable according to claim 18 wherein said tubular element further comprises a third outer sheath made from said water-soluble polymeric composition.

21. Telecommunication cable according to claim 1 wherein said elongated element is a grooved core comprising at least one groove
30 longitudinally disposed on the outer surface of said core and housing said at least one transmitting element.